

## EXECUTIVE SUMMARY

Prepared April 30, 2007

**Mine Name:** Sawtooth Stone Quarry #1  
**Operator:** Sawtooth Stone Supply, LLC  
P.O. Box 49  
Oakley, Idaho 83346  
  
**Telephone:** (208) 677-3864 Fax: (208) 677-3868  
**Contact Person:** Bruce Mitchell

**I.D. No.:** M/003/067  
**County:** Box Elder County  
**New/Existing:** Status changing from  
small mine to large mine  
**Mineral Ownership:** FEE  
**Surface Ownership:** FEE  
**Lease No.(s):** N/A  
**Permit Term:** Life of Mine (20 yrs)

**Legal Description:** This Quarry is located in portions of the S1/2 of the SE1/4 of the S1/4 of Section 28,  
Township 14 North, Range 17 West, SLBM

**Mineral(s) to be Mined:** Quartzite Flagstone.

**Acres to be Disturbed:** 10.5 acres.

**Present Land Use:** Grazing, Wildlife Habitat.

**Postmining Land Use:** Grazing, Wildlife Habitat.

### **Variances from Reclamation Standards (Rule R647) Granted:**

1. Variance to rule R647-4-111.8: Reclamation of Roads is approved to leave the access road for continued use of the landowner. The landowner requested the road be left to access his property after mining has ceased.
2. Variance to rule R647-4-107.5: Topsoil Salvaging is approved to not salvage soils over the mining area. Soils on this area are very shallow or occur in small pockets. Reasonable efforts will be made to salvage these soils. For reclamation, overburden/fines material will be amended to make a suitable plant growth medium.

### **Soils and Geology**

**Soil Description:** Soils in the project area are of the Parkay-Broad Canyon Families Association. Included in this unit are the Eyre family soils which are shallow, and associated with rock outcrops and ridges (typical of the soils on the project area). The soils in this association are classified as a gravely loam to a very gravelly loam and range in depth from outcropping bedrock (Quartzite) to 20 inches deep.

**pH:** Soil reactivity ranges from 6.1-7.8 pH units

**Special Handling Problems:** None.

**Geology Description:** This project is located in the quartzite of the Clarks Basin Formation which is believed to be of very late pre-Cambrian to Cambrian age. It has been altered to a thin-layered quartz-mica schist.

### **Hydrology**

**Ground Water Description:** A small spring is present about 2,200 feet east-southeast of the project in a different drainage basin. Based on the elevation of this spring, groundwater is estimated to be about 100 feet below the lowest quarry level. No effects from mining on groundwater are anticipated..

**Surface Water Description:** With the exception of the spring mentioned above, there are no surface waters in the vicinity of this project. A small, poorly defined ephemeral drainage exists along the east side of the quarry. Water is only present during times of rapid runoff occurring during heavy rain or rapid snowmelt. The drainage disappears within a quarter mile below the quarry. The effect of this operation on stream flow is insignificant.

**Water Monitoring Plan:** None required.

**Ecology**

**Vegetation Type(s); Dominant Species:** The project is located within the mountain shrub zone, and is dominated by mountain sagebrush. There are scattered clumps of serviceberry, mahogany, and buckbrush in the area. The dominant grass in the area is fescue and bluebunch wheatgrass.

**Percent Surrounding Vegetative Cover:** Vegetative ground cover in the area was estimated to be 70%.

**Wildlife Concerns:** There are no known threatened or endangered species, or critical habitat for important wildlife species within the project area.

**Surface Facilities:** There are no permanent facilities associated with this project. There is a small camp area where camp trailers are parked to house work crew. A fuel tank has been located on site within a secondary containment structure that has a minimum 110% capacity of the fuel tank. Access to the quarry is across private lands which are fenced and signed as no trespassing.

**Mining and Reclamation Plan Summary:**

**During Operations:**

A trackhoe will be used to remove the quartzite from the highwall face and the floor of the pit. The quartzite is then sorted, split and stacked on pallets for shipping. A small area is utilized to park camp trailers for workers to stay in during the active season. Pit development will occur on 15-foot lifts. Highwall development will have a small bench left with each lift and a larger, safety bench every 75 feet. Safety berms will be maintained above highwalls. The access road is signed to keep unauthorized persons from entering the mine area.

**After Operations:**

All pits will be reclaimed by partial backfill of waste rock/overburden materials. Highwalls will be reduced to 3h:1v slopes, with the exception of the final (75 feet) highwall, which will be left at a 1:1 slope, due to an expected lack of material to backfill this section. All compacted areas will be ripped to eliminate compaction. Topsoil or amended plant growth material will be respread at a 6-inch depth. The final surface will be left in a roughened condition to aid in moisture retention and plant growth. All areas will be seeded with an approved seed mixture that was developed for the post mining land use of grazing and wildlife habitat. The access road will remain as per the landowners request to access his property.

**Surety**

**Amount:** \$36,000.00 (in 2012 dollars)

**Form:** Unknown at this time

**Renewable Term:** 5 years.